



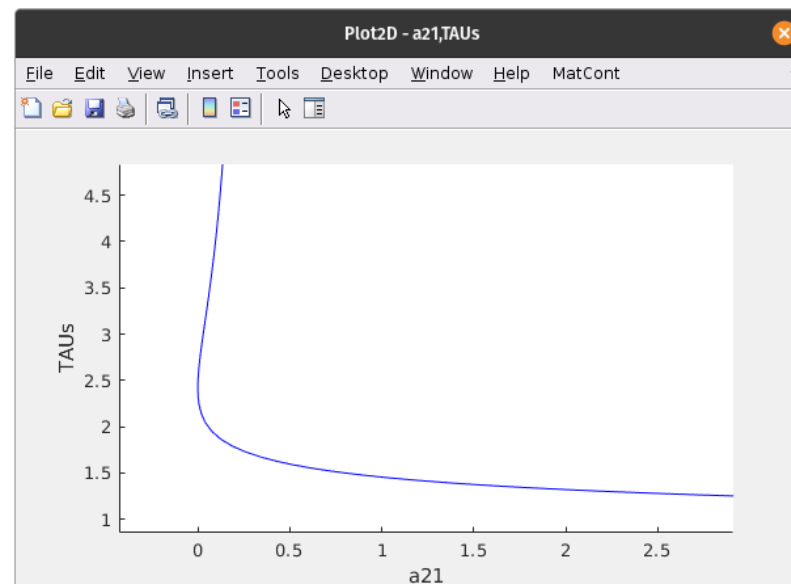
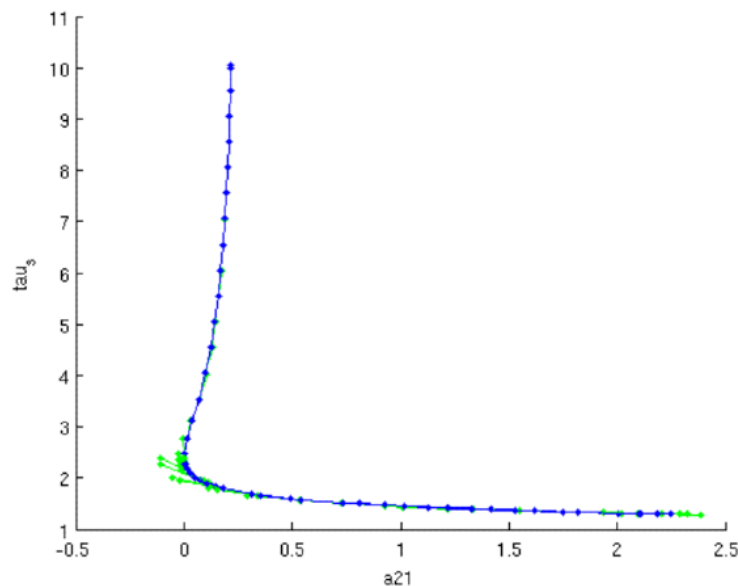
BSc in Computer Science

# Numerical bifurcation analysis of delay equations: A user-friendly extension of MatCont's interface

Prof. Rossana Vermiglio

Enrico Santi

Dr. Davide Liessi





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**Enrico Santi** –

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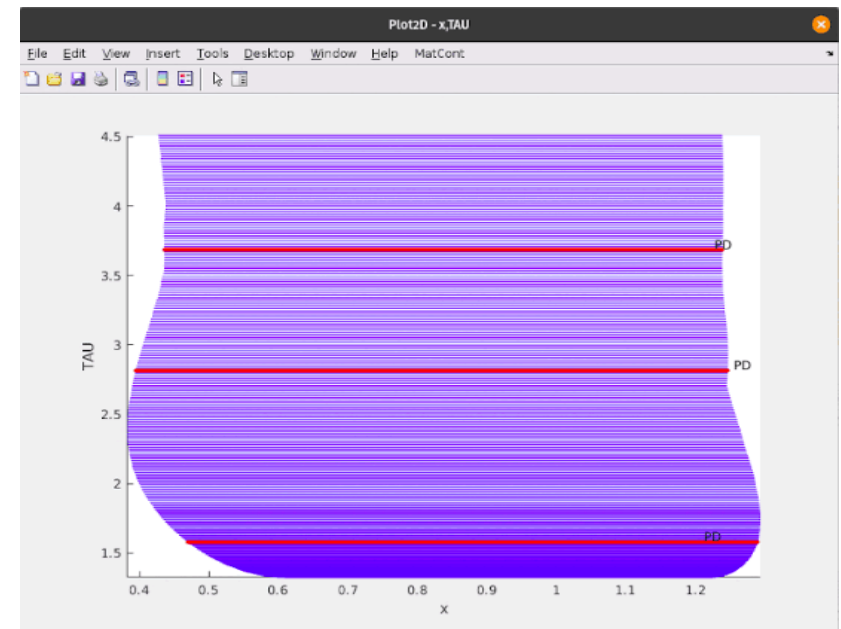
The thesis is related to the internship done at the CDLab of the University of Udine

## What has been done

The task carried out during the internship concerned the extension of MatCont to allow users to input and conduct a bifurcation analysis of dynamical systems described by delay equations.

## Challenges

- Working in a new field where I had no knowledge.
- Understanding how the different components of the software worked together.
- Finding the right regions to accommodate the modifications for the behaviour.



The work done will be presented at then 17<sup>th</sup> IFAC workshop on TDSs in Montreal, September 2022.